

**§ 431.25**

**10 CFR Ch. II (1–1–10 Edition)**

Energy Efficiency and Renewable Energy shall as soon as practicable, following receipt and review of comments and responsive statements on the interim determination, publish in the FEDERAL REGISTER a notice of final determination on the Petition.

(f) *Additional information.* The Department may, at any time during the recognition process, request additional relevant information or conduct an investigation concerning the Petition. The Department's determination on a Petition may be based solely on the Petition and supporting documents, or may also be based on such additional information as the Department deems appropriate.

(g) *Withdrawal of recognition—(1) Withdrawal by the Department.* If the Department believes that an accreditation body or certification program that has been recognized under §§ 431.19 or 431.20, respectively, is failing to meet the criteria of paragraph (b) of the section under which it is recognized, the Department will so advise such entity and request that it take appropriate corrective action. The Department will give the entity an opportunity to respond. If after receiving such response, or no response, the Department be-

lieves satisfactory correction has not been made, the Department will withdraw its recognition from that entity.

(2) *Voluntary withdrawal.* An accreditation body or certification program may withdraw itself from recognition by the Department by advising the Department in writing of such withdrawal. It must also advise those that use it (for an accreditation body, the testing laboratories, and for a certification organization, the manufacturers) of such withdrawal.

(3) *Notice of withdrawal of recognition.* The Department will publish in the FEDERAL REGISTER a notice of any withdrawal of recognition that occurs pursuant to this paragraph.

**ENERGY CONSERVATION STANDARDS**

**§ 431.25 Energy conservation standards and effective dates.**

(a) Each electric motor manufactured (alone or as a component of another piece of equipment) after October 24, 1997, or in the case of an electric motor which requires listing or certification by a nationally recognized safety testing laboratory, after October 24, 1999, shall have a nominal full load efficiency of not less than the following:

Motor horsepower/ standard kilowatt equivalent	Nominal full load efficiency					
	Open motors (number of poles)			Enclosed motors (number of poles)		
	6	4	2	6	4	2
1/.75 .....	80.0	82.5	.....	80.0	82.5	75.5
1.5/1.1 .....	84.0	84.0	82.5	85.5	84.0	82.5
2/1.5 .....	85.5	84.0	84.0	86.5	84.0	84.0
3/2.2 .....	86.5	86.5	84.0	87.5	87.5	85.5
5/3.7 .....	87.5	87.5	85.5	87.5	87.5	87.5
7.5/5.5 .....	88.5	88.5	87.5	89.5	89.5	88.5
10/7.5 .....	90.2	89.5	88.5	89.5	89.5	89.5
15/11 .....	90.2	91.0	89.5	90.2	91.0	90.2
20/15 .....	91.0	91.0	90.2	90.2	91.0	90.2
25/18.5 .....	91.7	91.7	91.0	91.7	92.4	91.0
30/22 .....	92.4	92.4	91.0	91.7	92.4	91.0
40/30 .....	93.0	93.0	91.7	93.0	93.0	91.7
50/37 .....	93.0	93.0	92.4	93.0	93.0	92.4
60/45 .....	93.6	93.6	93.0	93.6	93.6	93.0
75/55 .....	93.6	94.1	93.0	93.6	94.1	93.0
100/75 .....	94.1	94.1	93.0	94.1	94.5	93.6
125/90 .....	94.1	94.5	93.6	94.1	94.5	94.5
150/110 .....	94.5	95.0	93.6	95.0	95.0	94.5
200/150 .....	94.5	95.0	94.5	95.0	95.0	95.0

(b) For purposes of determining the required minimum nominal full load efficiency of an electric motor that has a horsepower or kilowatt rating between two horsepowers or kilowattages

listed consecutively in paragraph (a) of this section, each such motor shall be deemed to have a horsepower or kilowatt rating that is listed in paragraph (a) of this section. The rating that the

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motor is deemed to have shall be determined as follows:

(1) A horsepower at or above the midpoint between the two consecutive horsepower shall be rounded up to the higher of the two horsepower;

(2) A horsepower below the midpoint between the two consecutive horsepower shall be rounded down to the lower of the two horsepower, or

(3) A kilowatt rating shall be directly converted from kilowatts to horsepower using the formula, 1 kilowatt = (1/0.746) horsepower, without calculating beyond three significant decimal

places, and the resulting horsepower shall be rounded in accordance with paragraphs (b)(1) or (b)(2) of this section, whichever applies.

(c) Each general purpose electric motor (subtype I), except as provided in paragraph (d) of this section, with a power rating of 1 horsepower or greater, but not greater than 200 horsepower, manufactured (alone or as a component of another piece of equipment) on or after December 19, 2010, shall have a nominal full load efficiency that is not less than the following:

FULL-LOAD EFFICIENCIES OF GENERAL PURPOSE ELECTRIC MOTORS

[Subtype I]

Motor horsepower	Nominal full load efficiency					
	Open motors (number of poles)			Enclosed motors (number of poles)		
	6	4	2	6	4	2
1 .....	82.5	85.5	77.0	82.5	85.5	77.0
1.5 .....	86.5	86.5	84.0	87.5	86.5	84.0
2 .....	87.5	86.5	85.5	88.5	86.5	85.5
3 .....	88.5	89.5	85.5	89.5	89.5	86.5
5 .....	89.5	89.5	86.5	89.5	89.5	88.5
7.5 .....	90.2	91.0	88.5	91.0	91.7	89.5
10 .....	91.7	91.7	89.5	91.0	91.7	90.2
15 .....	91.7	93.0	90.2	91.7	92.4	91.0
20 .....	92.4	93.0	91.0	91.7	93.0	91.0
25 .....	93.0	93.6	91.7	93.0	93.6	91.7
30 .....	93.6	94.1	91.7	93.0	93.6	91.7
40 .....	94.1	94.1	92.4	94.1	94.1	92.4
50 .....	94.1	94.5	93.0	94.1	94.5	93.0
60 .....	94.5	95.0	93.6	94.5	95.0	93.6
75 .....	94.5	95.0	93.6	94.5	95.4	93.6
100 .....	95.0	95.4	93.6	95.0	95.4	94.1
125 .....	95.0	95.4	94.1	95.0	95.4	95.0
150 .....	95.4	95.8	94.1	95.8	95.8	95.0
200 .....	95.4	95.8	95.0	95.8	96.2	95.4

(d) Each fire pump motor manufactured (alone or as a component of another piece of equipment) on or after

December 19, 2010, shall have a nominal full load efficiency that is not less than the following:

FULL-LOAD EFFICIENCIES OF FIRE PUMP MOTORS

Motor horsepower	Nominal full load efficiency							
	Open motors (number of poles)				Enclosed motors (number of poles)			
	8	6	4	2	8	6	4	2
1 .....	74.0	80.0	82.5	.....	74.0	80.0	82.5	75.5
1.5 .....	75.5	84.0	84.0	82.5	77.0	85.5	84.0	82.5
2 .....	85.5	85.5	84.0	84.0	82.5	86.5	84.0	84.0
3 .....	86.5	86.5	86.5	84.0	84.0	87.5	87.5	85.5
5 .....	87.5	87.5	87.5	85.5	85.5	87.5	87.5	87.5
7.5 .....	88.5	88.5	88.5	87.5	85.5	89.5	89.5	88.5
10 .....	89.5	90.2	89.5	88.5	88.5	89.5	89.5	89.5
15 .....	89.5	90.2	91.0	89.5	88.5	90.2	91.0	90.2
20 .....	90.2	91.0	91.0	90.2	89.5	90.2	91.0	90.2
25 .....	90.2	91.7	91.7	91.0	89.5	91.7	92.4	91.0
30 .....	91.0	92.4	92.4	91.0	91.0	91.7	92.4	91.0

## FULL-LOAD EFFICIENCIES OF FIRE PUMP MOTORS—Continued

Motor horsepower	Nominal full load efficiency							
	Open motors (number of poles)				Enclosed motors (number of poles)			
	8	6	4	2	8	6	4	2
40 .....	91.0	93.0	93.0	91.7	91.0	93.0	93.0	91.7
50 .....	91.7	93.0	93.0	92.4	91.7	93.0	93.0	92.4
60 .....	92.4	93.6	93.6	93.0	91.7	93.6	93.6	93.0
75 .....	93.6	93.6	94.1	93.0	93.0	93.6	94.1	93.0
100 .....	93.6	94.1	94.1	93.0	93.0	94.1	94.5	93.6
125 .....	93.6	94.1	94.5	93.6	93.6	94.1	94.5	94.5
150 .....	93.6	94.5	95.0	93.6	93.6	95.0	95.0	94.5
200 .....	93.6	94.5	95.0	94.5	94.1	95.0	95.0	95.0
250 .....	94.5	95.4	95.4	94.5	94.5	95.0	95.0	95.4
300 .....	.....	95.4	95.4	95.0	.....	95.0	95.4	95.4
350 .....	.....	95.4	95.4	95.0	.....	95.0	95.4	95.4
400 .....	.....	.....	95.4	95.4	.....	.....	95.4	95.4
450 .....	.....	.....	95.8	95.8	.....	.....	95.4	95.4
500 .....	.....	.....	95.8	95.8	.....	.....	95.8	95.4

(e) Each general purpose electric motor (subtype II) with a power rating of 1 horsepower or greater, but not greater than 200 horsepower, manufactured (alone or as a component of another piece of equipment) on or after December 19, 2010, shall have a nominal full load efficiency that is not less than the following:

## FULL-LOAD EFFICIENCIES OF GENERAL PURPOSE ELECTRIC MOTORS

[Subtype II]

Motor horsepower	Nominal full load efficiency							
	Open motors (number of poles)				Enclosed motors (number of poles)			
	8	6	4	2	8	6	4	2
1 .....	74.0	80.0	82.5	.....	74.0	80.0	82.5	75.5
1.5 .....	75.5	84.0	84.0	82.5	77.0	85.5	84.0	82.5
2 .....	85.5	85.5	84.0	84.0	82.5	86.5	84.0	84.0
3 .....	86.5	86.5	86.5	84.0	84.0	87.5	87.5	85.5
5 .....	87.5	87.5	87.5	85.5	85.5	87.5	87.5	87.5
7.5 .....	88.5	88.5	88.5	87.5	85.5	89.5	89.5	88.5
10 .....	89.5	90.2	89.5	88.5	88.5	89.5	89.5	89.5
15 .....	89.5	90.2	91.0	89.5	88.5	90.2	91.0	90.2
20 .....	90.2	91.0	91.0	90.2	89.5	90.2	91.0	90.2
25 .....	90.2	91.7	91.7	91.0	89.5	91.7	92.4	91.0
30 .....	91.0	92.4	92.4	91.0	91.0	91.7	92.4	91.0
40 .....	91.0	93.0	93.0	91.7	91.0	93.0	93.0	91.7
50 .....	91.7	93.0	93.0	92.4	91.7	93.0	93.0	92.4
60 .....	92.4	93.6	93.6	93.0	91.7	93.6	93.6	93.0
75 .....	93.6	93.6	94.1	93.0	93.0	93.6	94.1	93.0
100 .....	93.6	94.1	94.1	93.0	93.0	94.1	94.5	93.6
125 .....	93.6	94.1	94.5	93.6	93.6	94.1	94.5	94.5
150 .....	93.6	94.5	95.0	93.6	93.6	95.0	95.0	94.5
200 .....	93.6	94.5	95.0	94.5	94.1	95.0	95.0	95.0

(f) Each NEMA design B general purpose electric motor with a power rating of more than 200 horsepower, but not greater than 500 horsepower, manufactured (alone or as a component of another piece of equipment), on or after December 19, 2010, shall have nominal full load efficiency that is not less than the following:

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FULL-LOAD EFFICIENCIES OF NEMA DESIGN B GENERAL PURPOSE ELECTRIC MOTORS FULL-LOAD EFFICIENCIES OF GENERAL PURPOSE ELECTRIC MOTORS

Motor horsepower	Nominal full load efficiency							
	Open motors (number of poles)				Enclosed motors (number of poles)			
	8	6	4	2	8	6	4	2
250 .....	94.5	94.5	95.4	94.5	94.5	95.0	95.0	95.4
300 .....		94.5	95.4	95.0		95.0	95.4	95.4
350 .....		94.5	95.4	95.0		95.0	95.4	95.4
400 .....			95.4	95.4			95.4	95.4
450 .....			95.8	95.8			95.4	95.4
500 .....			95.8	95.8			95.8	95.4

(g) This section does not apply to definite purpose motors, special purpose motors, and those motors exempted by the Secretary.

[69 FR 61923, Oct. 21, 2004, as amended at 74 FR 12071, Mar. 23, 2009]

§ 431.26 Preemption of State regulations.

Any State regulation providing for any energy conservation standard, or other requirement with respect to the energy efficiency or energy use, of an electric motor that is not identical to a Federal standard in effect under this subpart is preempted by that standard, except as provided for in Section 345(a) and 327(b) and (c) of the Act.

LABELING

§ 431.30 Applicability of labeling requirements.

The labeling rules in § 431.31, established pursuant to Section 344 of EPCA, 42 U.S.C. 6315, apply only to electric motors manufactured after October 5, 2000.

§ 431.31 Labeling requirements.

(a) *Electric motor nameplate*—(1) *Required information*. The permanent nameplate of an electric motor for which standards are prescribed in § 431.25 must be marked clearly with the following information:

(i) The motor's nominal full load efficiency (as of the date of manufacture), derived from the motor's average full load efficiency as determined pursuant to this subpart; and

(ii) A Compliance Certification number ("CC number") supplied by DOE to the manufacturer or private labeler,

pursuant to § 431.36(f), and applicable to that motor. Such CC number must be on the nameplate of a motor beginning 90 days after either:

(A) The manufacturer or private labeler has received the number upon submitting a Compliance Certification covering that motor, or

(B) The expiration of 21 days from DOE's receipt of a Compliance Certification covering that motor, if the manufacturer or private labeler has not been advised by DOE that the Compliance Certification fails to satisfy § 431.36.

(2) *Display of required information*. All orientation, spacing, type sizes, type faces, and line widths to display this required information shall be the same as or similar to the display of the other performance data on the motor's permanent nameplate. The nominal full load efficiency shall be identified either by the term "Nominal Efficiency" or "Nom. Eff." or by the terms specified in paragraph 12.58.2 of NEMA MG1-1993, (Incorporated by reference, see § 431.15) as for example "NEMA Nom. Eff. \_\_\_\_\_." The DOE number shall be in the form "CC \_\_\_\_\_."

(3) *Optional display*. The permanent nameplate of an electric motor, a separate plate, or decalcomania, may be marked with the encircled lower case letters "ee", for example,



or with some comparable designation or logo, if the motor meets the applicable standard prescribed in § 431.25, as determined pursuant to this subpart, and is covered by a Compliance Certification that satisfies § 431.36.